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ORIGINAL ARTICLES

THE SPECIFIC TREATMENT OF ASTHMA IN CHILDREN*

By WILLIAM P. BUFFUM, M.D.

122 WATERMAN STREET, PROVIDENCE, R. I.

By specific treatment is meant treatment which deals with the specific cause or offending substance to which the patient is sensitive. This offending substance which by its presence causes the attack of asthma has been called an atopen and this is a very convenient term.

This atopen which is responsible for the trouble in an individual patient may be an inhaled substance such as pollen, animal dander, vegetable dust or the mixture of dusts known as house dust. It may be a food. There are surely many other atopens that have not been thought of.

Theoretically it would seem comparatively simple to skin test the patient with all the known atopens and treat him on that basis. Practically the problem is often of the greatest difficulty. Most patients when skin tested react to some substances, some react to a great many. If the patient is retested his reactions are often different.

If possible we must relate the tests to the symptoms and find out which atopens are actually causing the attacks. For instance, if a patient by skin test reacts to ragweed and yet there is no increase of symptoms during the ragweed season, it is evident that ragweed is not a principal cause of his trouble. If a patient reacts to egg and yet the rigid exclusion of egg from the diet causes no improvement in symptoms, we know that egg is not the chief cause of his asthma. If, however, a patient on testing reacts to a certain substance, and removal of that substance from the diet or environment causes a marked improvement in symptoms lasting over a period of months, then we can feel that the treatment is truly specific.

*From the Rhode Island Hospital Pediatric Allergy Clinic. Read before the Providence Medical Association November 6th, 1933.

I took thirty of my own clinic cases, unselected except that their records were complete enough for study, to see how accurately they could be classified. Two were ragweed cases. That is, their symptoms were practically entirely in the ragweed season, and they showed positive skin tests to ragweed only. One was diagnosed as an early summer grass case by the same reasoning. Four were house dust cases. They reacted strongly to house dust. Clinically they seemed to be due to dust, and dust treatment caused a great improvement. One of them reacted also to ragweed, but clinically there was no increase in the symptoms during the ragweed season. Five cases were bacterial; that is, their symptoms only appeared during a respiratory infection and usually with fever. They had no positive tests except one patient who reacted to house dust and ragweed.

These twelve cases should be considered as having their symptoms due to a single cause. The other eighteen were cases of mixed and unclassified sensitization. In these mixed cases the cause of the symptoms has not been made out. A sort of shot-gun treatment is instituted, foods to which they react are left out of the diet, and inhalants are reduced to a minimum. Desensitization to a suspected atopen may be tried and vaccines may be given to control respiratory infections. The results of this treatment are variable. Most of the patients are helped a great deal, some are helped a little, and a few are not helped at all.

By more active detective work we shall probably be able to find the substance which is causing the symptoms in a few more of these cases. The more time and thought expended, the greater number of cases can be adequately explained. There is always, however, a comparatively large group of cases of which the causative atopen cannot be determined. Of these, the small group of malnourished children with severe asthma contains most of the patients that do badly.

The treatment of pollen asthma is instructive in showing the value of desensitizing injections. Rackemann[1] reports that of seventy such cases, thirteen were completely relieved of their symptoms. VandeVeer, Cooke and Spain[2] report a relief in 75% of simple pollen asthma occurring with hay

fever. In asthma with multiple sensitization the results cannot be so good.

Our own cases have varied considerably. One case came in the middle of the season with mild ragweed asthma. Instructions to stay in the city and to keep the windows closed at night were sufficient to completely relieve him. Another whose symptoms are due to ragweed was entirely unaffected by injection treatment which was given during the season. In most of our ragweed sensitive cases the symptoms are not confined to the ragweed season. In other words there is a multiple sensitization, and ragweed treatment alone does not give very good results. Change to a locality where there is no ragweed is not usually practicable for the patient.

Animal danders cause a very important group of cases. The presence of the animal causing symptoms, and the clear cut test frequently makes this situation obvious. More difficult are the cases in which the animal hair is used in some manufactured article. A good deal has been written on this subject, and the possibilities in an individual case can be worked out if one can take time to do it. Sometimes the situation is quite obvious. One patient was sensitive to dog dander, and her symptoms were proved to be due to the hair of a new doll. The symptoms began on the day the doll was given her and stopped on the day it was taken away. For at least a year she had no more asthma. Whether the doll's hair was dog hair or not was never proved. New York men have shown that hospital patients there are often sensitized to rabbit hair and get their symptoms from the hair in bedding and upholstered furniture.

Feather pillows, mattresses stuffed with animal hair, stuffed furniture, hangings and rugs are frequent sources of trouble. It is not known how much of this trouble is caused by the specific dander or feathers of the animal involved and how much is due to other dusts held by these articles. A feather pillow is a very dusty article and causes a lot of trouble, a good deal of which is doubtless due to other dusts than feather.

Animal sensitization cases are usually treated by attempts to avoid exposure. Sometimes desensitization is necessary and is likely to be at least partly successful.

The consideration of house dust as an atopen is comparatively recent. It was first recognized by Cooke[3] in 1922. About one-half of all asthmatics are sensitive in some degree by skin test to a preparation of house dust. This dust is found chiefly in rooms where people live. It is not found in new houses or in new furnishings, and it is less concentrated in public buildings and halls. It is best prepared from sweepings of bed rooms and living rooms.

Autogenous house dust preparations for testing are said to be best prepared by a rather complicated process of extracting and kept in a buffeted solution which will not become acid. For our material we soaked the dust in the smallest possible amount of 14% alcohol. This was used for scratch testing only.

Stock preparations both for scratch and intracutaneous testing can be bought and seem to give good results.

Positive tests are reported varying from 33%[3] to 63%[4] and higher by some foreign observers. The great difference in number of positive tests is probably due to technic. The New York Hospital stock dust preparation has been used in many foreign lands and gives the same results there as in New York.[5]

Although known atopens may be included in house dust, Cooke, and others[10] believe that house dust contains a new but unknown atopen.

Treatment consists chiefly in dust precautions. The home is kept as dustfree as possible. Upholstered furniture, rugs, hangings, and unnecessary furnishings are kept at a minimum. The house is kept rigidly clean. The bed room is as bare as possible, and it is best if it contains only an iron bed and a chair, with all clothes in another room. The pillow can be a rubber air pillow or a new kapok or silk floss one. With our outpatients we often have them enclose an old pillow and mattress in oil cloth. The bedding should be all washable. If necessary a well aired woolen blanket may be used in cold weather.

If these dust precautions do not give sufficient relief, desensitization can be tried. The results are said to be as good as in other inhalant sensitivities.

I cannot give any statistics as the dust work has only just been started, and it takes a long time to be sure of results in asthma. Two cases, however, illustrate the effect of dust treatment.

1. Gerald was a mild asthmatic, he gave no skin reactions except a + reaction to stock dust and a + + + reaction to dust from his own home. Dust precautions as outlined have almost entirely relieved him.

2. Dorothy is a moderate asthmatic. She rarely went more than a month without an attack which kept her awake a good deal of the night for a week or so. Her only positive skin tests are a + reaction to her own house dust and a large reaction to the stock dust. The stock dusk given intracutaneously gave a large delayed local reaction the next day, and also what was probably a mild general reaction with wheezing. She was at Lakeside for 70 days and had no asthma there. She was sent to the hospital for relief of a severe attack and promptly cleared up there without treatment. Dust precautions are now being tried at home and she is doing better.

With children we have a fair number of food cases. Almost always the offending foods can be left out of the diet. This procedure is especially good because with children the sensitization to foods usually disappears in time. If the child can take milk there is no great difficulty in arranging the rest of the diet with foods to which he is not sensitive. Occasionally a small child is sensitive to so many foods, such as milk, wheat, and eggs, that feeding is extremely difficult. In these cases desensitization is not infrequently attempted with milk. In desensitization the milk can be given daily beginning with a small quantity, maybe one drop, depending on the degree of sensitiveness. Usually this treatment is helpful, but the child is rarely entirely desensitized, and the amount of milk that can be taken may be limited.

Bacterial cases are very common. A bacterial case is one in which the symptoms occur only at the time of a cold or infection and usually there is a fever. The greater number of bacterial cases have no skin sensitizations, but this is not necessarily true. One case, for instance, reacted to ragweed, but clinically the ragweed sensitization was of no importance. These bacterial cases are usually treated by vaccines.

There has been a great deal of dispute about the use of vaccines in asthma and how they work. In 1917 Walker described scratch tests with bacterial extracts. He considered that a positive test indicated that the patient was sensitized to the bacterium giving the test. Cooke disagreed with him, and now it is almost universally conceded that scratch testing with bacterial products does not give information as to specific sensitization.

Some men believe that intracutaneous tests with vaccines are of value in selecting the vaccine. The reactions here are delayed reactions similar in appearance to a tuberculin test. Rackemann,[1] who has done a good deal of work on this point, advocates giving a vaccine which gives a good reaction on subcutaneous injection.

Vaccine treatment in asthma seems to be entirely non-specific. As in other non-specific shock therapy, certain cell activities are stimulated. Increased cell activity may favor the production of anti-bodies and may speed up detoxication.

Vaccine therapy usually gives an improvement in symptoms, and sometimes this is quite striking. It is, however, temporary, lasting a few weeks or months, and is not to be compared with specific treatment.

During 1933 I have given a stock mixed vaccine to twenty-one patients at the R. I. Hospital. Eleven out of the twenty-one were better after the treatment. Of the remaining ten only one had more than five doses, and the others did not return or returned so late that the treatment could not be properly judged. At any rate more than half were benefited, and four were given complete relief for from one to six months afterwards.

Vaccine therapy is also helpful in preventing respiratory infections. Different authors have reported from 68%[6] to 59%[7] of good results. In the current *A.M.A. Journal* Dochez, Mills and Kneeland[11] state that respiratory infections are shorter and have fewer complications after vaccine prophylactic therapy.

One form of treatment which is useful occasionally, especially in severe cases, is a change of residence. If relief can be obtained in no other way, it is likely that if the patient moves he will be better. This is probably because he escapes from the inhalant atopen which is bothering him. This is especially likely to happen if he goes to a hospital or sanitorium where there is a minimum of furnishings and a maximum of scrubbing.

During July, August, and September this year seven cases of asthma were sent to the Rhode Island Hospital for relief, three of them in very severe attacks. Six out of the seven were well in twenty-four hours without treatment. One case continued and was relieved by adrenalin and other medication.

During the first nine months of 1933, 8 asthmatics were sent to Lakeside. While at Lakeside 4 mild ones had no asthma. Two mild ones had very slight asthma, and 2 severe ones continued to have trouble. The average stay was ten weeks.

This benefit from hospitalization and change of residence is well known. It must be due to relief from inhalant atopens.

The results of the treatment of asthma can only be estimated accurately after several years. Walzer[2] after reviewing a large number of statistics considers that in 50% of cases perfect or nearly perfect results are obtained, and that in less than 20% is the treatment useless. Rowe[11] dealing with children had better results, only 2.7% having no relief. Rackemann in analyzing a thousand and seventy-four patients of all ages after two years found 20% unimproved and 10% dead, but states that children do better than adults.

The great majority of children with asthma can be either entirely relieved or considerably improved.

REFERENCES

1. Rackemann, F. M.: Clinical Allergy, Macmillan Co., 1931.
2. VanderVeer, Cooke and Spain: Am. Jour. Med. Sci. 174:101, 1927.
3. Cooke, R. A.: J. Immunol. 7:147, 1922.
4. McLaughlin, J. S.: J.A.M.A. 89:863, 1927.
5. Bowman, Katherine and Walzer, Mathew: Asthma and Hay Fever by Coca, Walzer and Thommen, Charles C. Thomas, 1931.
6. Rackemann, F. M.: Clinical Allergy, pp. 494-495.
7. Walker, I. C.: Arch. Int. Med. 43:429, 1929.
8. Walzer, Mathew: Asthma and Hay Fever by Coca, Walzer and Thommen.
9. Rowe, A. H.: Am. J. Dis. Child. 31:51, 1926.
10. Peshkin, M. M.: Am. J. Dis. Child. 31:763, 1926.
11. Dochez, A. R., Mills, K. C., and Kneeland, Y.: J.A.M.A. 101:19:1441, 1933.

ASTHMA STUDY IN CHILDREN*

By DRS. REUBEN C. BATES AND STANLEY FREEDMAN

122 WATERMAN STREET, PROVIDENCE, R. I.

For the purpose of this paper we have considered a group of 108 patients seen in the Children's Asthma Clinic of the R. I. Hospital from 1930 to the present time. A large percentage have been under observation for 1 to 3½ years.

The youngest child seen in the clinic was three years of age, while the oldest was thirteen. There were 21 children under five years and 87 over five. The shortest time any child in the group suffered from asthma was 6 months while the longest was 11 years. The average number of years suffering from the disease was 3½ years. This last figure illustrates the fact that asthma is a long drawn-out condition.

When a history of infantile eczema is found an allergic origin is suggested. In this group 32% gave such a history, which is somewhat higher than quoted by other authors who obtained their information after the patient has reached adult life.

The number of cases giving a definite family history of atopy, one or both sides, was 59%. Spain and Cooke[1] have shown that in families in which there is a bi-lateral history of hyper-sensitiveness, nearly three-fourths will eventually develop some form of atopy, and in those families in which there is an uni-lateral history, more than one-half will develop such symptoms. Manifestations of hypersensitiveness in the offspring do not necessarily take the same form as that in which they appear in the ancestors. It is still a moot question as to whether allergy is an hereditary disease or whether there exists in certain individuals a predisposition to the acquisition of protein hyper-sensitiveness. A study of the family history of allergic patients will reveal the fact that a much larger number of relatives are found to be affected with manifestations of allergy than is the rule in other families.

When a child comes to the clinic the first step is to determine, in a general manner, whether the problem is an allergic one. With the history of recurrent bronchitis or pneumonia, or if the child sneezes every morning or coughs a great deal at night, and these conditions are paroxysmal, there is a suggestion of respiratory allergy. If the sneezing or coryza occurs in the spring or August we have a suggestion of hay-fever.

Specific History

All the factors attendant on the onset of the disease should be inquired into carefully; for example, we should try to find out the places the patient visits, the first ingestion of certain foods, the bedding used, contact with animal or bird pets. The occurrence of attacks at night may indicate a relation to the bedroom; occurrence in the daytime shortly after a meal may indicate some relation to foods. It is also a great help to get an exact description of the most recent attack. Removal of feather pillows and coverings for mattresses sometimes results in complete cessation of the symptoms.

*From the Rhode Island Hospital Pediatric Allergy Clinic. Read before the Providence Medical Association November 6th, 1933.

Environment

Proximity to stables, chicken farms and other dusty environments might also be the cause of allergic conditions. The home should be investigated for the detection and analysis of all dust-producing articles. Bed clothes, furniture, floor coverings, toys, clothing and pets have all been found to be causative agents in producing this condition. Our worker has visited many of the homes of our patients and made many suggestions regarding the prevention of attacks by creating a dust-free room.

We have followed in a general way the classification of Rackemann, i.e., Extrinsic Asthma, which includes those patients whose asthma depends upon some cause outside the body, and those in which the cause depends on something wrong inside the body we call "Intrinsic." We have tried to follow the etiological classification which depends upon an analysis of the patient as a whole: his history, physical examination, skin tests, and end result.

Classification

	Number cases
1. Extrinsic Asthma	66
Pollen asthma	
Animal asthma	
Mixed and unidentified	
Extrinsic Specials:	
Dust, Feathers, Orris	
Food, Eggs, Fish	
2. Intrinsic Asthma	27
Bacterial asthma	
3. Hay Fever	15
Total	108

The diagnosis of asthma is easy, but the determination of the specific cause is beset with many difficulties. One must devote a great amount of time, effort and ingenuity in the search of a causative agent, if there be one. One must be alert to the possibility of contact with an unexpected substance at home, at school or on the street. Even the very air which an asthmatic breathes should be under suspicion for it may carry dust particles which, though harmless to the non-allergic individual, may act like a trigger to let loose a severe attack in a person who is subject to asthma.

The diet must likewise be investigated. Often a patient is aware of the fact that a certain article of food is responsible for allergic symptoms. In such instances it is best to eliminate the foods under suspicion, even though scratch or patch tests are inconclusive. Food is generally not considered of great importance as an exciting factor in the production of asthma. Food sensitivity is usually linked with eczema, gastro-intestinal disturbances, migraine, angio neurotic edema and the like. However, a person who has an allergic physical make-up will remain in his hyper-sensitive state as long as he is constantly exposed to an offending substance. For example, an asthmatic person who is sensitive to a focus of infection in the para nasal sinuses or to dust, if he is at the same time sensitive to egg yolk, the ingestion of egg yolk will arouse and aggravate his sensitivity to his focus of infection or to the inhaling dust and produce an attack. This point has been proven many times to our complete satisfaction.

We think of inhalants as being the excitors of asthmatic attacks. Our experience with 170 asthmatic children has shown that most of them show multiple sensitivity.

Table 1

Number of Positive Skin Reactions in the Various Groups

Animal Emanations	47
Food	75
Pollen	59
Dust	39
Bacterials	24

Table 1 shows that our asthmatics gave 75 positive reactions to various articles of food, in addition to the positive reactions given to various inhalants, namely, animal emanations, pollens and dust.

Table 2 is presented to show the articles which are often giving positive reactions. However, if a complete diagnostic survey is to be made, one should make tests with all the available materials to which a human being may be exposed.* By so doing pleasant surprises will often occur by discovering some innocent unexpected substance to which positive reactions will be obtained.

Table 2

Items Which Produced the Greatest Number of Positive Reactions

1. Animal Emanations:
   - Cat Hair
   - Rabbit Hair
   - Chicken Feathers
2. Pollens:
   - June Grass
   - Orchard Grass
   - Ragweed
3. Food:
   - Egg Yolk
   - Egg White
   - Tomatoes
   - Salmon
   - Strawberries
4. Dust:
   - From Own Home

*The technic of the tests is purposely omitted as it is taken for granted that everyone is familiar with it.

Allergists have been calling attention to the fact that the sedimentation speed of the red blood corpuscles is increased in asthma, and that the rate of this increase in speed is directly proportional to the severity of the asthma. We have done 58 sedimentation speed tests on as many asthmatics. These cases varied from very mild to very severe cases. We also noted the presence or absence of chronic foci of infection in these 58 asthmatic children. A child was considered as having a focus of infection if an X-ray examination revealed marked thickening of the lining of the para nasal sinuses, or thickening of the walls of the bronchial tree, or if the child had clinical evidence of repeated tonsilar infection. If we could show that a rapid sedimentation rate is always or nearly always associated with the presence of long standing infection, and if it could, furthermore, be shown that a rapid sedimentation rate is usually observed in the very severe cases of asthma, then the sedimentation test could be used as a means to prognosticate to a certain extent upon the future severity or upon the probable duration of the disease. It could also be used as a guide in the detection of the presence or absence of chronic hidden foci of infection.

In our group of fifty-eight children whose sedimentation rates we determined, we found that the time varied from thirty minutes to six hours. Two hours is considered normal for the average well person, for the technic employed in our tests. Allergic individuals are supposed to have a faster rate, namely, a rate less than two hours. Normal individuals have rates of two hours or longer. We found that as many children had evidence of chronic foci of infection in the slow sedimentation speed group as in the fast group. We also found that many of the very severe cases of asthma had very slow rates, rates even as slow as four and five hours. Likewise we found a few mild cases of asthma, and a few cases with no evidence of chronic foci of infection in the rapid rate group.

We have therefore concluded that the sedimentation time is not a reliable index to the degree of severity or to the presence or absence of chronic infection in asthmatics. Furthermore, the varied rates obtained indicate that allergy itself does not influence the sedimentation time.

Each child has had several cultures taken during his visits to the clinic. These were taken generally at a time when the patient was having an acute attack of asthma. Cultures of sputa from over one hundred specimens showed an incidence of bacteria in the following predominance:

TABLE 3

Organisms	*Per Cent*
Pneumococci	41
Streptococci	30
M. Catarrhalis	15
Staphylococci	14

The blood studies showed a moderate amount of anemia probably due to the continued attacks many of the children were subject to. All but one child showed a consistent eosinophilia, while the blood chemistry did show a lowered blood calcium. The blood phosphorus level was practically normal.

Blood Counts	No. Examined	High	Low	Average
W.B.C.	154	22,500	2,375	9,300
R.B.C.	154	5,790,000	1,950,000	4,485,000
Hemoglobin	150	95%	64%	81%
Eosinophilia	146	24%	1.5%	6.9%

Criep and McElroy of Pittsburgh studied Blood Calcium in atopy and found that patients suffering from asthma have a blood calcium which closely approximates the normal. They concluded "that a deficiency of the blood calcium cannot be found to exist in atopic conditions, and calcium therapy does not seem to produce a permanent increase in the blood calcium of atopically sensitive patients." In 80 cases of asthma they report an average of 10.08 mg. per c.c. The blood chemistry findings from our clinic follow:

TABLE 4

Blood Chemistry Determinations

(mg. per 100cc serum)

	No. Examined	High	Low	Average
Calcium	120	11.0	5.3	8.6
Phosphorus	117	7.9	2.5	4.5

Dr. Charles Bradley, in a personal communication, has recently given us an average of 124 Blood Calcium determinations in children of our age group, and who were non-asthmatics, of 10.8 mg. The blood phosphorus average was 4.5 mg. or the same as we had obtained.

It is important to realize that the manifestations of allergy may be noted for the first time following one of the common contagious diseases of childhood. Peshkin found that pertussis was the most frequent causative disease. Measles and scarlet fever may also be a cause. Pneumonia and influenza may also be responsible. In one group the common cold was followed by asthma in 19 patients. From

the parents of our children we found that most of the attacks of asthma began after the following diseases:

TABLE 5

1.	Whooping Cough	16
2.	Colds	19
3.	Measles	8
4.	Pneumonia	11
5.	Bronchitis	9
6.	After Removal of Tonsils	2
7.	Undetermined	25

Many of our children were found to be sensitive clinically to certain foods as observed by the parents.

TABLE 6

Number of Cases Sensitive (Clinically) to Foods

Egg	14
Tomatoes	2
Milk	1
Spinach	1
Beans	1
Corn	1
Fish	1
Potato	1
Candy	1
Orange	1

Eliminating the offending foods will generally achieve good results in many instances.

Table 7 shows the incidence of tuberculin reactions found in non-asthmatic children varying from 9.3% to 20%, while in asthmatic children we obtained positive tests in 20%. It has been found that area testing among large groups of children will average around 28% of reactors.

TABLE 7

Incidence of T. B. Reactions

NON-ASTHMATIC CHILDREN

Chadwick	9.3%
Sill	9.2%
Slater	8.6%
C. H. Smith	16.9%
Pinckney	20.0%
Anderson	16.7%

ASTHMATIC CHILDREN

Reisman and Mason	38.6%
Allergy Clinic (R. I. Hospital)	20.0%

The intra-cutaneous tuberculin test (1-1,000) was performed on all children in the Allergy Clinic, the ages varying from 3 years to 13 years. Many workers believed that asthma in children was due to some form of pressure or obstruction from the enlarged tracheo-bronchial glands. Schick in 1910 presented 36 cases of asthma caused by Tuberculous Tracheo-Bronchial glands of which 13 were confirmed by autopsy. Other writers have reported cases of Tuberculosis of the hilum glands in children simulating asthma. Reisman and Mason believe that the asthma is due to a sensitization on the part of the individual to the bacterial products of tubercule bacilli probably tuberculin. They tested 30 cases of asthma with Tuberculin and stated the results in many cases was almost a specific. Ling in 1928 reported in the Lancet equally good results in treating asthmatic children with the tuberculin whether the skin reaction was positive or negative.

Lewison and Freilich reported on fifty-one cases of asthma which also had tuberculosis, and with tubercule bacilli in their sputum. Rackemann and Colmes found thirteen patients with active tuberculosis among their series of 1074 cases. Reisman and Mason showed that a positive tuberculin test occurred in 38% of 158 children with asthma, but in only 17% of non-asthmatic children.

About 400 X-rays have been analyzed by the roentgenologist from chest plates taken of our children. These were repeated once a year. The findings are quite typical and the chronic cases show more marked "fibrosis." There is generally thickening of the peribronchial structure, due to lymph glands at the lung root. At times these markings radiate out toward the periphery and may be quite extensive, although we agree with Rackemann in that "severe and long standing asthma can occur without fibrosis."

Routine X-rays were taken of the sinuses in all our patients and many were repeated during the past four years. In allergy, positive findings may be purely transitory, being present at one time and absent at another. Definite X-ray evidence of abnormal shadows in one or more sinuses was found in 67% of our cases. Chobot recently reported a series of 84 asthmatic children where he found evidence of sinus disease in 67%. Rackemann and Tobey, in a study of 1074 patients with asthma, found evidence of sinus disease in 44%. It is reasonable to believe that about one-half the patients who have asthma may be expected to have sinus disease associated with it. Bullen believes that the condition which tends to produce asthma in an individual may also tend to bring about pathologic changes in the sinuses and vice versa, and that in a large proportion of the patients, in which the two

(*Continued on page 43*)

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RHODE ISLAND MEDICAL SOCIETY

Meets the first Thursday in September, December, March and June

CHARLES S. CHRISTIE	*President*	West Warwick
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DISTRICT SOCIETIES

KENT

Meets the second Thursday in each month

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Meets the second Thursday in each month

D. P. A. JACOBY	*President*	Newport
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Meets the first Monday in each month excepting July, August and September

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R. I. Ophthalmological and Otological Society—2d Thursday—October, December, February, April and Annual at call of President. Dr. Robert C. O'Neil, President; Dr. N. A. Bolotow, Secretary.

The R. I. Medico-Legal Society—Last Thursday—January, April, June and October, Dr. Fenwick G. Taggart, President; Dr. Jacob S. Kelley, Secretary-Treasurer.

EDITORIALS

LABORATORY GUIDES IN MEDICAL PRACTICE

Common sense must always be the watchword of the busy practitioner. A great deal has been said, and with good reason, about the tendency of the modern medical man to lean unduly upon the laboratory in the matter of diagnosis and to forget the use of eyes, ears and hands. Yet it must be admitted that without the aid of special tests in the fields especially of bacteriology, chemistry, clinical microscopy and X-ray, we would be back in the dark ages floundering helplessly and relying on clinical guesses, shrewd perhaps, but often wrong. The wise practitioner, too busy to waste time on frills that may make his work seem "scientific" to his patients, knows when laboratory tests are indispensable and conclusive, when they are merely helpful, and when they are superfluous, an added and unjustifiable waste of time and money. He has equipped himself to do somethings for himself and is seldom driven to the indefensible practice of sending urine samples to the public laboratories for analysis. He makes it a rule to use the leucocyte count routinely as an aid in studying infections.

The triple ideal of Osler "The library, the laboratory and the nursery; books, balances and bairns" is in his mind. But though he knows that a throat culture or sputum test may be decisive in the diagnosis of diphtheria or pulmonary tuberculosis, he does not ever try to shift the responsibility for solving his clinical problems to the shoulders of the man who, for example, does his blood chemistry and interprets his X-rays or electrocardiograms. In other words, the clinician, if he be worthy of the name, keeps his own hand on the tiller, accepting this or that aid in charting his course, but always realizing that, after all the laboratory reports are in and all the opinions of consultants, if any, have been recorded, it is he and he only who must make the final decision.

ASTHMA STUDY IN CHILDREN

(*Continued from page 41*)

conditions are found, it is improbable that the sinusitis, in itself, is the cause of the asthma or that the asthma is responsible for the sinus changes.

A questionnaire was sent to all parents of the children and in most cases the worker in the clinic asked the questions directly. It was interesting to see that 72 children of the 108 in the series were definitely aided by the clinic.

Clinical Results

1. Did the clinic help your child?
   - Yes 72
   - No 21
2. Has your child's condition improved?
   - Much 39
   - Moderate 19
   - Slight 21
   - No 14
3. Are the attacks less severe since the tonsils were removed?
   - Yes 37
   - No 38

It is generally believed by many that removal of tonsils is seldom of any value although we believe many of our children have been benefited greatly by this procedure. Why this surgical operation benefits asthmatics we are unable to explain, unless it is due to non-specific shock which temporarily benefits the allergic state. A number of our children have been free from attacks for two years after a tonsillectomy.

REFERENCES

1. Lewison, M., and Freilich, E. B.: Bronchial Asthma: Relation to Pulmonary Tuberculosis, Illinois M. J., 1927: 51: 73.
2. Reisman, H. A., and Mason, R. L.: Tuberculosis and Asthma in Children, N. Y. State J. Med., 1909: 29: 919.
3. Spain, W. C., and Cooke, R.: A. J. of Immun., 9, 1927, p. 521.
4. Rackemann, Francis M.: Clinical Allergy, Macmillan Co., 1931.
5. Ling, T. M.: Treatment of Asthma in Children with Tuberculin, Lancet, Nov. 10, 1928.

REPORT OF THE PROVIDENCE TUBERCULOSIS LEAGUE

By Dr. John I. Pinckney, *Executive Secretary*

1933

"A wise man once said that the greatest stumbling block to progress is the fact that we know so much that isn't so. If we could approach new ideas with an open mind, free from misconceptions and false ideas of the past, our progress would be greatly accelerated."

Our present-day conception of the control of tuberculosis is so radically different in many ways from that of only a few years ago it is hard for us to readjust ourselves to a new order of procedure.

We all recognize that these are days of prevention, but we fail to recognize that the only sure way of preventing tuberculosis is by preventing infection. We have assumed that by the time adult life was reached we were all infected, without applying the tuberculin skin test and determining the fact. Thousands upon thousands of children and young adults in all parts of the country to whom the tuberculin skin test has been given have proven the fallacy of this statement.

In the early days of skin testing we saw so many children and young adults, apparently in good health, who reacted positively to the tuberculin skin test, that we concluded there was a sharp line of demarkation between the tuberculous infection and tuberculous disease. We said, "Yes, infection has occurred and it is probably a good thing, as it will confer upon the individual a certain amount of immunity which will protect him from reinfection in the years to come."

Even in the presence of calcified lesions in the lung field and in the hilus glands visualized by the X-ray, we concluded that the lesions had healed and

that probably no further trouble would arise. Had we followed over a period of years, as is now being done, these infected individuals, both with and without demonstrable lesions, we would have seen many of them fall ill with tuberculosis.

Our follow-up study over a period of nine years indicates that tuberculous infection, as well as the demonstrable childhood type of the disease, instead of protecting the individual from subsequent infections, is in reality definitely detrimental in that it alters the normal resistance to tuberculosis present in the uncontaminated human body in such a manner, that, should reinfection occur, the first infection, which is usually benign, gives place to the second or the adult pulmonary form, which in altogether too many cases proves fatal, due chiefly to the fact that we have waited, under the old order of procedure, for signs and symptoms to appear before making the diagnosis. This is why our institutions are filled to overflowing with moderately and far advanced cases, and alters, in no uncertain manner, the need of institutional care.

It seems impossible for us to conceive that it is possible to have a progressive lesion developing in the lung, that can be demonstrated and followed by means of the X-ray from month to month over a period, sometimes of years, without giving rise to any abnormal findings on physical examination, and the individual remains in apparently good health, absolutely free from symptoms, and yet this is exactly what is happening among a great many of our young people, and is why we will continue to need and demand more institutional beds for the care of the tuberculous.

Disregarding the fact that, had the diagnosis been made and proper treatment been instituted before the disease advanced to the stage where signs and symptoms appeared, many could have been restored to health without a prolonged sanatorium stay, with uncertain results and added cost.

In every phase of present-day life we are striving for new and more efficient methods to cope with old problems. This is particularly true in tuberculosis. With the coming of the sanatorium idea we thought that the problem was solved, but it soon became evident that the sanatorium could hope to reach but a small percentage of those in need of observation, supervision and care.

The most vital factor in the management of large numbers of cases through the clinic is the institution of an adequate program of home treatment. We already appreciate that, under existing conditions, the sanatoria are not capable of handling the long list of patients seeking admission. The patient who must wait his turn for sanatorium treatment, in many instances, has lost the probability of cure, when the time for his admission arrives unless, while waiting, he is subjected to a careful regime of home treatment.

Few patients remain long enough in the sanatorium to arrest their disease and therefore treatment must be continued in the home after their discharge from the sanatoria. I believe that the time has come, with our mounting numbers of known cases, to make the principles of home treatment acceptable to all, and bring the message to the public that protracted sanitorium residence, expensive climatic changes and costly specialistic care are not absolutely essential in the cure of tuberculosis.

More money spent in the field or, in other words, in the home, will accomplish equally good results at a far less cost in properly selected cases, and enable the sanatorium to meet the demands for the newer therapeutic indications, surgical and otherwise, in properly selected cases.

Economies and the principle of the greatest good to the greatest number urge us on toward another objective, namely, the greatest possible good with the shortest possible sanatorium stay. At the present time every tuberculosis program, if it is to travel in the right direction, must consist of two units, a sanatorium unit and a field unit, each unit bearing a very definite relationship to the other, the efficiency of both depending very largely upon the degree of co-ordination and co-operation with each other.

Such a program calls for the development of an adequate field unit operated through the clinic through whose agency all tuberculosis members of the community and their contacts are placed under supervision, treated according to the modern conception of home treatment, classified according to the disease progress into various types, and in individual cases, sent to the institution for treatment.

The function of the sanatorium under such plans involves the welfare of the patient and, in addition, if proper reciprocal relations are to be maintained with the field unit, the welfare of the community. On the theory that we must prevent infection if we would prevent disease, each patient discharged from the sanatorium must be properly evaluated as to his or her potentiality as a possible health menace.

Theoretically, the sanatorium stay would be materially shortened. Suitable cases receiving collapse therapy would be returned to their homes at a much earlier date to continue treatment with their private physician or under the clinic. It is therefore imperative that considerable time be devoted to the education of the patient in the care of themselves and in the protection of others.

The closest co-operation between the sanatorium and the field unit along this or other similar lines is not a new idea. It has been in practice in many of our largest cities for some time with the most gratifying results, as shown by a greatly accelerated decrease in the mortality rate. That there is real need for action at this time is clearly shown by an analysis of 1351 diagnosed pulmonary cases in our active files on December 16th.

On that date, 110 were at the Sanatorium; 36 at the Charles V. Chapin Hospital; 5 at Hillsgrove, a total of 151 receiving treatment in institutions; the remaining 1200 were in their homes, 575 of whom were being followed by the District Nursing Association, leaving a balance of 625 in all stages of the disease without supervision, aside from occasional visits to the clinic.

Of the total of 1351 cases, 635 had had the advantages of sanatorium treatment at some time, while 716 had never been to an institution. Under these conditions, is it any wonder that we do not make greater progress?

I realize that this is no time to suggest the expenditure of more money for health and welfare work, no matter how badly it may be needed, as all the agencies of the Community Fund are operating under curtailed budgets; however, there is a way to put on a demonstration in one of seven districts where tuberculosis is the most prevalent, with little or no additional expense.

Let us assume that it is possible to bring together, in a temporary manner, for demonstration purposes, a representative of the Board of Health, the Department of Public Aid, the District Nursing Association, the Family Welfare Society and the Tuberculosis League, as an active unit, and, as consultant in special cases, the private physician living in or practicing in the district. The building inspector, Mother's Aid, the School Department, the Children's Friend Society, the Society for the Prevention of Cruelty to Children, the American Red Cross, the International Institute and such other agencies best equipped to handle special problems that may arise from time to time.

Representatives of all these agencies are now working in the districts. The majority of the cases to be handled are already known to many of them and such new cases as may come to their attention should occasion no great expense. In fact, I believe that money would be saved by avoiding duplication and through the pooling of our efforts. I shall not go into detail as to just how this unit would operate. Its many advantages are apparent, as it offers to the individual and the family an immediate consideration of their problem from all angles.

The bronchiectasis clinic, a new piece of work, made possible by a grant of $500 from the Rhode Island Foundation, was inaugurated during the year. The use of lipiodol marks a step forward in the diagnosis and treatment of bronchiectasis, a chronic disease unrelated to tuberculosis but often times diagnosed as such. Its sufferers cough and expectorate large quantities of fetid, purulent material, which becomes so offensive at times that they are shunned by all.

By introducing lipiodol into the bronchus we are able to definitely localize the disease process and decide upon a proper course of treatment to fit each individual case. Periodic injections of the oil have proven of definite benefit in some of our cases as a form of treatment. The injections have been made by Dr. J. Murray Beardsley, assisted by Dr. U. E. Zambarano, and Dr. Linly Happ has volunteered his services as ortolaryngologist to conduct the nose and throat examinations. Arrangements are now under way at the Charles V. Chapin Hospital to provide bronchioscopic examinations and treatment when indicated.

The collapse theory clinic offers pneumothorax and surgical treatment. The laboratory staff of the same institution is co-operating with us to the fullest extent. Since March, 35 patients have received 41 injections. Time and space will not permit me to tell you of the many gratifying results, both from the standpoint of diagnosis and treatment.

One by one the development of the pneumothorax clinic, the surgical clinic, the bronchiectasis clinic, and finally the bronchoscopic clinic, mark milestones on the road to the present-day conception of the necessary aids in the proper treatment of chest conditions.

These several clinics offer to the people of Providence a service which, in years gone by, had to be sought elsewhere. To Dr. Nat Gifford, Dr. J. Murray Beardsley, who have been active in the development of the surgical clinic, Dr. Zambarano, who has

directed the pneumothorax clinic, and to Dr. Harvey Wellman, Dr. Frank Merlino, Dr. J. Murray Beardsley and Dr. Julius Kelley, who have volunteered their services in this clinic, to Dr. Linly Happ, who is now developing the bronchoscopic clinic at the Rhode Island Hospital, to Dr. Dennett L. Richardson and the entire staff of the Charles V. Chapin Hospital, the people of Providence owe their grateful thanks for making this necessary work possible.

The special follow-up work reported on last year was continued for the first six months of this year, with the same gratifying results, Unfortunately, lack of funds make it impossible to continue this valuable work.

The work among the junior and senior high school students has been carried on as in former years. This year, out of 2838 children who received the tuberculin skin test, 625, or 23%, reacted positively; among 616 who were X-rayed, 6 pulmonary cases were found and 84 showed evidence of the childhood type of the disease.

In the pneumothorax clinic held at the Chapin Hospital, 74 patients received 1548 refills. In the pulmonary clinic at the Lying-In Hospital, 149 individuals received 360 examinations, and 101 were X-rayed.

The attendance at all the tuberculosis clinics, by old and new patients for the year totaled 19,077, compared with 17,036 during the year 1932, an increase of 2,041, or 12%.

During the year 1933, 4,366 new patients were admitted to the clinics and 3,723 re-admitted, a total of 8,089 persons, or 707 more than during 1932, an increase here, therefore, of 9.6%.

Among this group 1,449 were found to have tuberculosis, 1,272 were considered as suspects and kept for further observation, as were 1,802 clinically non-tuberculous contacts, and 3,566 no evidence, non-contacts; 884 were discharged as non-tuberculous.

The number of new cases of tuberculosis diagnosed during the year, namely 724, exceeds last year's total by 151. They were classified as follows: 527 were considered to be in the minimal stage; 98 were moderately advanced; 38 were far advanced; and 61 suffered from non-pulmonary forms of the disease.

Living in the homes of the newly-diagnosed cases were found to be 2,256 contacts. As many of these as we have been able to get into the clinic, have been examined.

All told, during the year, 2,714 contacts have been examined; 3,398 tuberculin skin tests have been given and 4,415 X-rays have been taken. On January 1, 1934, the total tuberculosis register, including both old and new cases and their contacts contained altogether, 17,286 individuals.

The number of deaths from all forms of tuberculosis in the city of Providence for the year 1933 was 126, including 16 non-residents. In addition there were 49 Providence residents who died of tuberculosis elsewhere, making our corrected death rate 61.6 per hundred thousand for the year 1933, as against 65.1 per hundred thousand in 1932, a decline of 3.5%.

As the years go by the value of the work at Lakeside under the able direction of Miss Mary Murray has become so well known that it is unnecessary for me to tell you that the institution has completed another successful year. Greater care in the selection of children most in need of this type of treatment has been a feature of this year's work, preference being given to those in whose homes an open case of tuberculosis existed, in this way breaking the contact, thus allowing the child to build up a resistance to the disease. The details of the work done at the institution will be presented in Miss Murray's report.

To the contributors to the Community Fund, who make this work possible, and to Miss Murray, Dr. William P. Buffum, Mrs. Hilda Burnill and the entire staff, we owe a debt of gratitude.

Our 1933 budget was again figured upon a 16,000 clinic visit basis, but it seems utterly impossible to keep within this number, and I assure you it is getting to be a real feat to come to the end of the year with no deficit, particularly this year, with 19,077 clinic visits. The details of receipts and expenditures are presented in the Treasurer's report. The books have been audited and are open to your inspection.

In accordance with our agreement with the State Tuberculosis Association we received $792 from this organization as our share of the 1932 Christmas Seal Sale.

The Community Fund, as in years gone by, has been most sympathetic and understanding and, while this did not add to our budget, it has helped us in many ways over rough places.

It would be a great pleasure to me to thank, individually, the 219 physicians, the nurses of the Health Department, the School Department, the District Nursing Association, and those in indus-

trial plants and the 33 different agencies, including the Department of Public Aid, which has provided us, from time to time, with clerical workers, also numerous individuals who have assisted, in one way or another, in the building up of the work.

To the entire staff of the organization, who have worked so harmoniously together throughout the year and to the Executive Committee, I again express my grateful thanks for their co-operation and support.

OBITUARY

DR. HENRY PLUMMER LOVEWELL

Henry Plummer Lovewell, M.D., was born October 27, 1866, the son of Baron P. and Louise Mowry Lovewell, and died January 1, 1934, at his home, 1266 Westminster St., Providence, R. I., after an illness of two weeks.

Dr. Lovewell, a graduate of Mowry and Goff's Preparatory School, received an A.B. degree from Brown University in 1889, and an M.D. degree from Harvard Medical School in 1893. He served an interneship of two years at the McLean Hospital and finished a medical interneship at the Boston City Hospital in 1896.

Dr. Lovewell was survived by his wife, Helen C. Worthley, only a few days; two daughters, Mrs. Sally Keith Barney and Mrs. Louise Baron Sheldon.

Dr. Lovewell was loved and admired by his patients and respected by his friends. He was a man of many interests, a great lover of nature, a botanist of no mean ability, and a student of bird lore.

It is with a sense of loss that we note the passing of Henry P. Lovewell, a doctor and gentleman of the old school.

CHARLES F. DEACON,
GEO. S. MATHEWS.

SOCIETIES

THE RHODE ISLAND MEDICAL SOCIETY

COUNCIL

February 9, 1934.

The regular quarterly meeting of the Council was held Feb. 9, 1934, at the Medical Library Building, and was called to order at 4:30 P. M. by the 2nd Vice President, Dr. Roland Hammond, and subsequently presided over by the President, Dr. Charles S. Christie.

The Council voted to approve the letter announcing the formation of a Nose and Throat Pay Clinic at 485 Broadway to be sent to the physicians of Rhode Island, the heads of the several hospitals in Rhode Island and to the Superintendents of City and Town Health Departments.

The Council voted to place upon the retired list of members:

Dr. Patrick H. Keefe,
Dr. Horace N. Williams.

The Council further voted that the following members be dropped for non-payment of dues:
Dr. Earl R. Devere, Woonsocket, R. I.
Dr. Edw. F. Dougherty, Jr., Providence.
Dr. G. Stanley Gordon, Providence.
Dr. Valentine Ujhely, State Hospital, Howard, R.I.

Adjourned.

Respectfully submitted,
J. W. LEECH, M.D., *Secretary*

HOUSE OF DELEGATES

February 9, 1934.

The regular quarterly meeting of the House of Delegates was held Feb. 9, 1934, at the Medical Library Building and was called to order at 5 P. M. by the President, Dr. Charles S. Christie.

A letter from the Woonsocket District Medical Society which was presented to the general session on Dec. 7, 1933, and referred from there to the House of Delegates for action was read by the secretary. This letter was a protest against the institution of a Mental Hygiene Clinic by non-medical organizations in the City of Woonsocket staffed by members of the State Hospital for Mental Diseases at Howard. On motion made by Dr. Charles L. Farrell and duly seconded, it was voted that a committee of three be appointed by the chair to investigate health clinics throughout the State, to receive complaints, and to report its findings and recommendations at the next meeting of the House of Delegates. The Chairman appointed the following committee:

Dr. Chas. L. Farrell, Chairman,
Dr. Arthur P. Noyes,
Dr. C. C. Dustin.

Dr. Charles F. Gormly, chairman of the Medical Emergency Relief Committee of the Rhode Island Medical Society made a verbal report of the activ-

ities of his committee. Several meetings of the committee have been held, and today preceding this meeting a conference had been held with the Governor and other members of the State Emergency Relief Commission. At this meeting it was urged upon the State Emergency Relief Commission the willingness of organized medical profession to cooperate with the Commission in the furnishing of medical relief to the indigent sick on the State Relief rolls, such medical services to be paid to the physicians from Federal Funds allocated to the State Unemployment Relief Commission.

The following basic policy and procedure based upon regulations No. 7 issued by the Federal Administrator of the Emergency Relief was presented to the State Emergency Relief Commission.

It was voted that the report of the committee be accepted and the committee continued.

Plan for the Medical Care of Persons on the Emergency Unemployment Relief Rolls

The Medical Emergency Relief Committee of the R. I. Medical Society Submits the Following Plan for the Medical Care of Persons on the Emergency Unemployment Relief Rolls.

The R. I. Medical Society recognizes and appreciates the necessity for the intervention of the Federal Government in giving medical relief to the distressed and sick on the Unemployment Relief Rolls. For this purpose the Federal Emergency Relief Administration makes available funds that can be used under certain specified conditions defined in Rules and Regulations No. 1. (These rules and regulations are set out in detail in the *Journal of the A.M.A.* of September 23, 1933.)

That these benefits may accrue both to the unemployed sick and to the family doctor who has in a great many cases given medical services without hope of remuneration, we offer this plan.

Policy

The basis of the policy is an agreement between the State Relief Administration and the organized medical profession to recognize the traditional family-physician relationship and an agreement by the physicians to furnish the same type of service to an indigent person as would be rendered to a private patient. That such service shall be a minimum, consistent with good professional judgment and shall be charged for at an agreed rate.

Procedure

A uniform procedure for medical care in the home shall be established by each local relief administration as follows:

(1) All authorizations for medical care shall be issued in writing by the local relief officer prior to the giving such care except that telephone authorizations shall immediately be followed by such a written order.

(2) Acute Illness—Authorizations for the medical care of acute illness shall be limited to a definite period and a maximum number of visits. Medical care in excess of this can only be authorized following investigation by the local relief officer.

(3) Chronic Illness — Medical care for prolonged illness shall be authorized on an individual basis and visits shall be limited in frequency by agreement.

(4) Obstetric Care—Authorization for obstetric cases in the home shall include an agreed number of prenatal visits, delivery in the home and proper post-natal care.

(5) Fee Schedule—The fee schedule shall be determined by agreement between the local relief administration and the local organized profession. All fee schedules shall be established on a basis of an appreciable reduction from the prevailing minimum charges in the given locality.

Authority

All agreements between local relief administration and the local medical profession must have the approval of the State Emergency Relief Administration.

Local relief administration shall request the president of the local district medical society to appoint a committee to advise them in the formation and adoption of these agreements and to assist them in maintaining proper professional standards and in deciding questions of policy and practice.

Participation in this work shall be open to all physicians licensed to practice medicine in this state who shall be willing to accept the regulations and provisions of this program.

The local relief administration and the local medical advisory committee in forming an agreement shall give due attention to the details of "Rules and Regulations No. 7 of the Federal Relief Administration."

The Medical Emergency Relief Committee of the R. I. State Medical Society shall act in an advisory capacity with the State Unemployment Relief Administration.

Adjourned.

Respectfully submitted,
J. W. LEECH, M.D., *Secretary*

PROVIDENCE MEDICAL ASSOCIATION

The regular monthly meeting of the Providence Medical Association was called to order by the president, Dr. Charles F. Gormly, Monday evening, February 5, 1934, at 9 o'clock. The records of the last meeting were read and approved. A letter was read from the secretary of the Rhode Island State Dental Society announcing that their president had appointed Dr. Raymond L. Webster to serve on the Milk Commission.

Dr. Charles F. Deacon read an obituary on Dr. Henry P. Lovewell, and it was voted to spread it on the records and send a copy to the family.

Dr. Herman A. Lawson reported a case of deficiency disease where a diet without fresh fruit or vegetables presented a picture very closely simulating pernicious anemia.

The subject of the evening was "The Treatment of Angina Pectoris and Congestive Heart Failure by Complete Ablation of the Thyroid." The medical aspects were discussed by Dr. Herman L. Blumgart, associate professor of Medicine, Harvard University Visiting Physician and Director of Research, Beth Israel Hospital. He mentioned the large group of workers they had investigating all aspects of this subject which had followed from studies of the rate of blood flow. This is slow in heart disease and varies with the metabolic rate being slow in myxoedema. Attempts to make a weak heart supply the necessary blood flow for the requirements of normal metabolism often result in failure. Put the body in a state of myxoedema with its low requirement and the weak heart may keep up to this light duty. The heart itself is unaffected. Total removal of thyroid tissue is necessary as hyperplasia results when a small remnant is left and improvement is only temporary. In general patients do well when the basal metabolic rate is kept about minus 30. Above this the heart proves inefficient. Below this the troublesome symptoms of myxoedema occur as edema, sluggish mentality, etc. Patients whose basal metabolic rate is already low before operation will not be improved. An analysis of results was given. Some patients can return to a fairly active life and nearly all have been markedly improved.

The surgical aspects were discussed by Dr. David D. Berlin, Assistant Professor in Anatomy, Tufts Medical School; Surgeon to the Thyroid Clinic, Beth Israel Hospital. He described the technique of operation stressing the necessity to remove all tissue, preserve the parathyroids and avoid injury to the recurrent laryngeal nerves which frequently lie in the tracheo-oesophageal sulcus but may be in close relation to or even for a short distance in the gland tissue itself. Careful laryngoscopic check up is made before the operation, after removal of one side and after the operation.

The patients are, of course, bad risks and anesthesia must be carefully chosen, being gas oxygen or nerve block.

The mortality has been low particularly in the latter part of their series.

Both papers were illustrated by numerous slides. They were discussed by Drs. Baldridge, Ferguson, Wells, Chase, Blumgart and Berlin. The meeting adjourned at 10:55 P. M. Attendance 172.

Collation was served.

PETER PINEO CHASE, *Secretary.*

Annual Report of Standing Committee

The Standing Committee of the Providence Medical Association held twelve meetings during the year 1933. Thirty-one applications for membership were approved and two laid on the table.

PETER PINEO CHASE,
Secretary.

Annual Report of the Treasurer, 1933

Cash on hand January 1, 1933	$1,699.51
Annual dues	1,870.00
Interest on daily balance Jan.-June	5.97
Checks not cashed December, 1933	61.50
	$3,636.98
Federal tax on checks	1.14
	$3,635.84

Statement of Participation Account

Participation Account January 1, 1933	$2,093.32
Interest on same for 1933	68.57
	$2,161.89

Annual Report of Treasurer, 1933

Donation Rhode Island Medical Society	$450.00
Collations	587.70
MEDICAL JOURNALS	248.30
Binding JOURNALS	190.89
General Expenses	187.82
Secretary to Treasurer	150.00
	$1,814.71
Cash on Hand January, 1934	1,821.13
	$3,635.84

The annual meeting of the Providence Medical Association was called to order by the President, Dr. James W. Leech, Monday evening, January 1, 1934, at 9:15 P. M. The records of the last meeting were read and approved. The reports of the Secretary, Treasurer, Standing Committee and Milk Commission were read and accepted. The report of the Reading Room Committee was dispensed with as it would be published in the MEDICAL JOURNAL. as it would be published in the Medical Journal. The President appointed as Obituary Committee for Dr. T. Edward Duffee the following: Dr. Charles O. Cooke and Dr. Henry W. Hopkins.

The paper of the evening was by Dr. V. H. Kazanjian, "Critical Analysis of Problems in Relation to Injuries of the Face and Jaws." Lantern demonstration. He considered intelligent first aid very important. Smears of wounds show no microorganisms at first, with a rapid increase as time elapses. Hence he advocates thorough mechanical treatment with soap and water, even using anesthesia if necessary, the removal of foreign bodies and blood clots, and cutting away of devitalized tissues. Drainage should be established for deep wounds. In some cases marks should be cut out with a trephine knife and sutured. Packs and hot dressings are sometimes necessary.

As the facial bones are the framework supporting the soft tissues, a slight displacement of these will often affect the shape. Mastication demands good occlusion of the jaws, nasal breathing may be affected by injuries to the nasal bones, and visual disturbances may result from orbital injuries. He then presented a large series of slides illustrating plastic operations.

The President's annual address spoke of the effect upon the profession of the economic depression and the allocation of public money under the Federal Emergency Relief Administration for payment for medical services. He felt this to be the entering wedge of State Medicine, and that the Socialization of Medicine must inevitably increase. We must recognize this and initiate plans ourselves which shall not sacrifice the high ideals of our profession. For this the leadership should come through our organization of county and state societies and the American Medical Association.

The officers and committees for the ensuing year were elected as follows:

Nomination of Officers

For President—Charles F. Gormly, M.D.

For Vice-President—William P. Buffum, M.D.

For Secretary—Peter Pineo Chase, M.D.

For Treasurer—Charles F. Deacon, M.D.

For Member of the Standing Committee for five years—James W. Leech, M.D.

For Trustee of the Rhode Island Medical Library for one year—Edward S. Brackett, M.D.

For Reading Room Committee—George S. Mathews, M.D.; Elihu Wing, M.D.; Guy W. Wells, M.D.

For Delegates to the House of Delegates of the Rhode Island Medical Society—F. W. Dimmitt, M.D.; R. DiLeone, M.D.; L. I. Kramer, M.D.; W. A. Horan, M.D.; P. C. Cook, M.D.; J. J. Hoey, M.D.; R. R. Baldridge, M.D.; C. C. Dustin, M.D.; E. A. Sharp, M.D.; J. G. Walsh, M.D.; C. H. Woodmansee, M.D.; R. H. Whitmarsh, M.D.; V. J. Oddo, M.D.; W. Hindle, M.D.; C. W. Skelton, M.D.; P. P. Chase, M.D.; L. C. Happ, M.D.; W. C. Gordon, M.D.; W. M. Muncy, M.D.; J. J. McCaffrey, M.D.; P. Conca, M.D.; C. B. Leech, M.D.; J. H. Bartley, M.D.

The new President, after a few remarks, nominated for committees:

Collation—Charles J. Ashworth, Joseph C. Johnston.

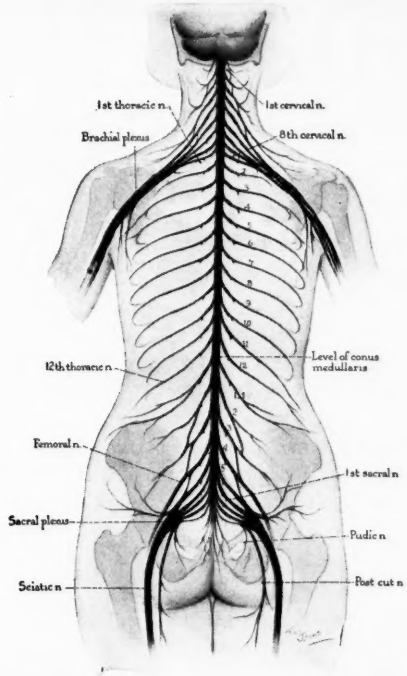
Publicity—Creighton W. Skelton, Frederick N. Brown, Harvey E. Wellman.

Public Relations—Francis V. Garside, Lucius C. Kingman, Maurice Adelman.

The President, after reporting shortly on the work of the Medical Relief Committee, announced changes in membership so that it shall be constituted as follows: W. B. Buffum, Chairman; James W. Leech, B. H. Buxton, W. S. Streker, Rocco Abbate.

It was voted that the President appoint four new members of the Milk Commission, increasing

(*Continued on page 52*)



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the size of said Commission to eight, and that he ask the President of the Dental Society to appoint a dentist to meet with them. These appointments he announced, making the Milk Commission: Harold G. Calder, Chairman, 3 years; Henry E. Utter, 5 years; H. P. B. Jordan, 4 years; Francis V. Corrigan, 4 years; Robert H. Whitmarsh, 3 years; Reuben C. Bates, 2 years; George W. Waterman, 2 years; A. R. Newsam, 1 year.

The Standing Committee having approved his application, Francis H. Chafee was elected to membership.

The meeting adjourned at 10:50 P. M.

Attendance 115.

Collation was served.

Respectfully submitted,

PETER PINEO CHASE,
Secretary.

BOOK REVIEWS

FETAL, NEWBORN AND MATERNAL MORBIDITY AND MORTALITY. Report of the subcommittee on factors and causes of fetal, newborn and maternal morbidity and mortality. Hugo Rhrenfest, M.D., Chairman. D. Appleton-Century Company.

This book should be of absorbing interest not alone to the obstetrician and pediatrician, but especially to the general practitioner upon whom throughout the country at large falls the responsibility of caring for the great majority of maternity cases. The title page is somewhat forbidding and has about it the odor of statistics. This is unfortunate, for it is much more than a trite statistical study. It is an encouragingly successful attempt to go behind statistics and discover the ultimate causes and draw practical conclusions for the guidance of the clinical obstetrician, the specialist or the general practitioner.

The first 181 pages discuss the complications of pregnancy. The arrangement is such that the busy doctor can quickly find an authoritative summary of the best informed opinions on specific problems raised by conditions complicating pregnancy. He is not obliged to search through textbooks on internal medicine or obstetrics, neither of which ordinarily treats in an adequate manner the ills from which the pregnant woman suffers in common with her non-pregnant sister.

The chapters on heart disease, nephritis, infectious and parasitic diseases, tuberculosis, syphilis, blood and endocrine diseases (goitre, diabetes, the anæmias, etc.) are concise but set forth with completeness the consensus on the best opinions on these often troublesome complications.

The chapters of forceps and Cæesarian section, while of interest to the specialist, should be read and pondered particularly by the men who are only occasionally called upon to consider performing these operations. The warning against the indiscriminate use of analgesia, anesthesia for the purpose of pain relief, is particularly timely. To one who believes that there is a crying need for a return to sanity in the practice of obstetrics, this report is most comforting.

Its conclusions and recommendations are not based upon the personal predilections of an advocate of this or that procedure, but on the critical study of a vast amount of statistical material by some forty collaborators eminently fitted for such a task. While based on statistical studies, the book is not cluttered up with tables. Statistical data are used only as a means of arriving at sound conclusions of clinical significance. It is to be hoped that it will be widely consulted and carefully read.

HOW TO BUDGET HEALTH GUILDS FOR DOCTORS AND PATIENTS, by Evans Clark. Harper & Brothers, New York.

This book sets forth the difficulties people have in paying doctors' bills and the problems the doctors meet in securing a fair income. It offers a plan, the "Medical Guild Proposal," which will help solve these problems. The Guild gives promise of professional independence, thus avoiding state or industrial medicine. It discusses state insurance and voluntary health insurance, and approaches to the Guild Plan. How Medical Guilds can be set up, including the business and professional problems. is shown here, and the attitude of the medical profession and the public is discussed. This book will be of interest to practicing physicians and hospital executives.